
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934
(Amendment No. 2)*

HedgePath Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, \$0.0001 par value

(Title of Class of Securities)

42278K 102

(CUSIP Number)

**Kate Rintoul
Level 1, 99 King Street
Melbourne, Victoria 3000
Australia
61 3 8614 7711**

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

May 25, 2016

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. ☐

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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1. NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Mayne Pharma Ventures Pty Ltd
I.R.S. Identification No. 98-1181089

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(see instructions)
(a) ☐
(b) ☐
-

3. SEC USE ONLY
-

4. SOURCE OF FUNDS (see instructions)
-

OO (1)

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) ☐
-

6. CITIZENSHIP OR PLACE OF ORGANIZATION
-

Australia

7. SOLE VOTING POWER
-

220,531,132 (1)(2)

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON WITH

8. SHARED VOTING POWER
-

-0-

9. SOLE DISPOSITIVE POWER
-

220,531,132 (1)(2)

10. SHARED DISPOSITIVE POWER
-

-0-

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
-

220,531,132 (1)(2)

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES
(see instructions) ☐
-

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
-

59.2% (1)(2)(3)

14. TYPE OF REPORTING PERSON (see instructions)
-

CO

-
- (1) On May 25, 2016, HedgePath Pharmaceuticals, Inc. (the “**Issuer**”) and Mayne Pharma Ventures Pty Ltd, an Australian company ACN 168 896 357 (“**Mayne Ventures**”), consummated a series of related transactions in order to obtain equity financing for the Issuer from Mayne Ventures. Specifically, (i) the Issuer and Mayne Ventures entered into a Securities Purchase Agreement (the “**2016 Purchase Agreement**”) pursuant to which the Issuer issued to Mayne Ventures (a) 27,885,000 shares of common stock, par value \$0.0001 per share (“**Common Stock**”), and (b) a warrant to purchase 27,885,000 shares of Common Stock at a per share exercise price of \$0.012 (the “**2016 Offering Warrant**”), in connection with the Issuer’s \$5,500,000 private placement offering of 55,000,000 units, consisting of (a) 55,000,000 shares of Common Stock and (b) warrants to purchase 55,000,000 shares of Common Stock at a per share exercise price of \$0.012 (the “**2016 Offering**”), and (ii) the Issuer issued to Mayne Ventures a warrant to purchase 479,236 shares of Common Stock at a per share exercise price of \$0.012 (the “**Mayne Ventures Finders Warrant**”), in connection with the Issuer’s issuance of warrants to certain FINRA-member broker-dealers engaged in connection with the 2016 Offering. The Issuer and Mayne Ventures agreed to combine the 2016 Offering Warrant and the Mayne Ventures Finders Warrant into a single warrant to purchase 28,364,236 shares of Common Stock at a per share exercise price of \$0.012 (the “**Combined Warrant**”). Refer to Item 3 below for a more detailed description of the transactions.
- (2) Assumes the full exercise of (i) the Combined Warrant, (ii) a warrant to purchase 10,250,569 shares of Common Stock issued by the Issuer to Mayne Ventures on June 24, 2014 (the “**2014 Warrant**”), and (iii) a warrant to purchase 33,333,333 shares of Common Stock issued by the Issuer to Mayne Ventures on May 15, 2015 (the “**2015 Warrant**”), in which case Mayne Ventures would hold 220,531,132 shares of Common Stock, constituting approximately 59.2% of the equity securities of the Issuer.
- (3) Based on 372,301,408 shares of common stock outstanding. This figure includes 245,353,270 shares of the Issuer’s Common Stock that were reported as issued and outstanding in the Issuer’s most recent Form 10-Q plus (i) the 55,000,000 shares of Common Stock issued under the 2016 Offering (which includes the 27,885,000 shares of Common Stock issued to Mayne Ventures pursuant to the 2016 Purchase Agreement) and (ii) the 71,948,138 shares of the Issuer’s Common Stock that would be outstanding assuming the full exercise of the Combined Warrant, the 2014 Warrant, and the 2015 Warrant.

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1. NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Mayne Pharma International Pty Ltd
I.R.S. Identification No. 98-1181817

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(see instructions)
(a) ☐
(b) ☐
-

3. SEC USE ONLY
-

4. SOURCE OF FUNDS (see instructions)
-

OO (1)

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) ☐
-

6. CITIZENSHIP OR PLACE OF ORGANIZATION
-

Australia

7. SOLE VOTING POWER
-

220,531,132 (1)(2)(3)

NUMBER OF
SHARES
BENEFICIALLY
OWNED BY
EACH
REPORTING
PERSON WITH

8. SHARED VOTING POWER
-

-0-

9. SOLE DISPOSITIVE POWER
-

220,531,132 (1)(2)(3)

10. SHARED DISPOSITIVE POWER
-

-0-

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
-

220,531,132 (1)(2)(3)

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES
(see instructions) ☐
-

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
-

59.2% (1)(2)(3)(4)

14. TYPE OF REPORTING PERSON (see instructions)
-

CO

-
- (1) On May 25, 2016, HedgePath Pharmaceuticals, Inc. (the “**Issuer**”) and Mayne Pharma Ventures Pty Ltd, an Australian company ACN 168 896 357 (“**Mayne Ventures**”), consummated a series of related transactions in order to obtain equity financing for the Issuer from Mayne Ventures. Specifically, (i) the Issuer and Mayne Ventures entered into a Securities Purchase Agreement (the “**2016 Purchase Agreement**”) pursuant to which the Issuer issued to Mayne Ventures (a) 27,885,000 shares of common stock, par value \$0.0001 per share (“**Common Stock**”), and (b) a warrant to purchase 27,885,000 shares of Common Stock at a per share exercise price of \$0.012 (the “**2016 Offering Warrant**”), in connection with the Issuer’s \$5,500,000 private placement offering of 55,000,000 units, consisting of (a) 55,000,000 shares of Common Stock and (b) warrants to purchase 55,000,000 shares of Common Stock at a per share exercise price of \$0.012 (the “**2016 Offering**”), and (ii) the Issuer issued to Mayne Ventures a warrant to purchase 479,236 shares of Common Stock at a per share exercise price of \$0.012 (the “**Mayne Ventures Finders Warrant**”), in connection with the Issuer’s issuance of warrants to certain FINRA-member broker-dealers engaged in connection with the 2016 Offering. The Issuer and Mayne Ventures agreed to combine the 2016 Offering Warrant and the Mayne Ventures Finders Warrant into a single warrant to purchase 28,364,236 shares of Common Stock at a per share exercise price of \$0.012 (the “**Combined Warrant**”). Refer to Item 3 below for a more detailed description of the transactions.
 - (2) Assumes the full exercise of (i) the Combined Warrant, (ii) a warrant to purchase 10,250,569 shares of Common Stock issued by the Issuer to Mayne Ventures on June 24, 2014 (the “**2014 Warrant**”), and (iii) a warrant to purchase 33,333,333 shares of Common Stock issued by the Issuer to Mayne Ventures on May 15, 2015 (the “**2015 Warrant**”), in which case Mayne Ventures would hold 220,531,132 shares of Common Stock, constituting approximately 59.2% of the equity securities of the Issuer.
 - (3) The reported securities are owned directly by Mayne Ventures. Mayne International Pty Ltd, an Australian company ACN 007 870 984 (“**Mayne International**”), holds 100% of the equity securities of Mayne Ventures. Mayne Pharma Group Ltd, an Australian company ACN 115 832 963 (“**Mayne Group**”), holds 100% of the equity securities of Mayne International. Accordingly, Mayne International and Mayne Group may be deemed indirect beneficial owners of the reported securities held by Mayne Ventures.
 - (4) Based on 372,301,408 shares of common stock outstanding. This figure includes 245,353,270 shares of the Issuer’s Common Stock that were reported as issued and outstanding in the Issuer’s most recent Form 10-Q plus (i) the 55,000,000 shares of Common Stock issued under the 2016 Offering (which includes the 27,885,000 shares of Common Stock issued to Mayne Ventures pursuant to the 2016 Purchase Agreement) and (ii) the 71,948,138 shares of the Issuer’s Common Stock that would be outstanding assuming the full exercise of the Combined Warrant, the 2014 Warrant, and the 2015 Warrant.

1. NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Mayne Pharma Group Ltd
I.R.S. Identification No. 98-1074924

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(see instructions)
(a) ☐
(b) ☐

3. SEC USE ONLY

4. SOURCE OF FUNDS (see instructions)

OO (1)

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) ☐

6. CITIZENSHIP OR PLACE OF ORGANIZATION

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220,531,132 (1)(2)(3)

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EACH
REPORTING
PERSON WITH

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-0-

9. SOLE DISPOSITIVE POWER

220,531,132 (1)(2)(3)

10. SHARED DISPOSITIVE POWER

-0-

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

220,531,132 (1)(2)(3)

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(see instructions) ☐

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59.2% (1)(2)(3)(4)

14. TYPE OF REPORTING PERSON (see instructions)

CO

-
- (1) On May 25, 2016, HedgePath Pharmaceuticals, Inc. (the “**Issuer**”) and Mayne Pharma Ventures Pty Ltd, an Australian company ACN 168 896 357 (“**Mayne Ventures**”), consummated a series of related transactions in order to obtain equity financing for the Issuer from Mayne Ventures. Specifically, (i) the Issuer and Mayne Ventures entered into a Securities Purchase Agreement (the “**2016 Purchase Agreement**”) pursuant to which the Issuer issued to Mayne Ventures (a) 27,885,000 shares of common stock, par value \$0.0001 per share (“**Common Stock**”), and (b) a warrant to purchase 27,885,000 shares of Common Stock at a per share exercise price of \$0.012 (the “**2016 Offering Warrant**”), in connection with the Issuer’s \$5,500,000 private placement offering of 55,000,000 units, consisting of (a) 55,000,000 shares of Common Stock and (b) warrants to purchase 55,000,000 shares of Common Stock at a per share exercise price of \$0.012 (the “**2016 Offering**”), and (ii) the Issuer issued to Mayne Ventures a warrant to purchase 479,236 shares of Common Stock at a per share exercise price of \$0.012 (the “**Mayne Ventures Finders Warrant**”), in connection with the Issuer’s issuance of warrants to certain FINRA-member broker-dealers engaged in connection with the 2016 Offering. The Issuer and Mayne Ventures agreed to combine the 2016 Offering Warrant and the Mayne Ventures Finders Warrant into a single warrant to purchase 28,364,236 shares of Common Stock at a per share exercise price of \$0.012 (the “**Combined Warrant**”). Refer to Item 3 below for a more detailed description of the transactions.
 - (2) Assumes the full exercise of (i) the Combined Warrant, (ii) a warrant to purchase 10,250,569 shares of Common Stock issued by the Issuer to Mayne Ventures on June 24, 2014 (the “**2014 Warrant**”), and (iii) a warrant to purchase 33,333,333 shares of Common Stock issued by the Issuer to Mayne Ventures on May 15, 2015 (the “**2015 Warrant**”), in which case Mayne Ventures would hold 220,531,132 shares of Common Stock, constituting approximately 59.2% of the equity securities of the Issuer.
 - (3) The reported securities are owned directly by Mayne Ventures. Mayne International Pty Ltd, an Australian company ACN 007 870 984 (“**Mayne International**”), holds 100% of the equity securities of Mayne Ventures. Mayne Pharma Group Ltd, an Australian company ACN 115 832 963 (“**Mayne Group**”), holds 100% of the equity securities of Mayne International. Accordingly, Mayne International and Mayne Group may be deemed indirect beneficial owners of the reported securities held by Mayne Ventures.
 - (4) Based on 372,301,408 shares of common stock outstanding. This figure includes 245,353,270 shares of the Issuer’s Common Stock that were reported as issued and outstanding in the Issuer’s most recent Form 10-Q plus (i) the 55,000,000 shares of Common Stock issued under the 2016 Offering (which includes the 27,885,000 shares of Common Stock issued to Mayne Ventures pursuant to the 2016 Purchase Agreement) and (ii) the 71,948,138 shares of the Issuer’s Common Stock that would be outstanding assuming the full exercise of the Combined Warrant, the 2014 Warrant, and the 2015 Warrant.

This Amendment No. 2 to Schedule 13D amends that certain Schedule 13D filed on July 7, 2014 (the “**Original Schedule 13D**”) by Mayne Pharma Ventures Pty Ltd, an Australian company ACN 168 896 357 (“**Mayne Ventures**”), Mayne Pharma International Pty Ltd, an Australian company ACN 007 870 984 (“**Mayne International**”), and Mayne Pharma Group Ltd, an Australian company ACN 115 832 963 (“**Mayne Group**” and collectively with Mayne Ventures and Mayne International, the “**Reporting Persons**”), as amended by that certain Amendment No. 1 to Schedule 13D filed on May 22, 2015 (“**Amendment No. 1**”). Item 3 of the Original Schedule 13D is hereby amended to the extent hereinafter expressly set forth. Capitalized terms used herein but not defined shall have the meanings attributed to them in the Original Schedule 13D or Amendment No. 1, as applicable.

Item 3. Source or Amount of Funds or Other Consideration.

Item 3 is hereby amended and restated to read as follows:

“Introduction, Background and Overview

On September 3, 2013, HedgePath Pharmaceuticals, Inc., a Delaware corporation (the “**Issuer**”), and Mayne International entered into a Supply and License Agreement (the “**Supply and License Agreement**”) pursuant to which Mayne International agreed to: (i) supply the Issuer with its patented formulation of the drug itraconazole, known as SUBATM-Itraconazole, in a particular dose formulation (the “**Product**”) for the treatment of human patients with cancer via oral administration (the “**Field**”) (with the initial areas of investigation being prostate, lung and skin cancer) in the United States (the “**Territory**”), (ii) provide the Issuer with an exclusive license to use and develop the intellectual property related to the Product in the Field and in the Territory and (iii) participate in a joint development committee with the Issuer to clinically develop the Product in the Field and in the Territory. The Supply and License Agreement was subject to early termination by Mayne International (the “**Termination Right**”) if certain conditions, including funding and other agreement conditions, were not undertaken (the “**Conditions**”).

On June 24, 2014, the Issuer and Mayne Ventures, as successor-in-interest to Mayne International, along with Nicholas J. Virca, the Issuer’s President and Chief Executive Officer (“**Virca**”), Frank O’Donnell, Jr., M.D., the Issuer’s Executive Chairman (“**O’Donnell**”) and Hedgepath, LLC, a Florida limited liability company and the majority stockholder of the Company which is controlled by Black Robe Capital LLC, of which O’Donnell is the manager (“**HPLLC**”), consummated a series of related transactions to fulfill the Conditions in a manner mutually acceptable to the Issuer and Mayne Ventures. In connection therewith, the Issuer and Mayne Ventures entered into an Amended and Restated Supply and License Agreement (the “**Amended Supply and License Agreement**”) principally to eliminate the Conditions and related early termination rights of Mayne Ventures. The transactions that occurred on June 24, 2014 are hereinafter referred to as the “**June 2014 Transactions**”.

On May 15, 2015, the Issuer and Mayne Ventures, along with Virca, O’Donnell and HPLLC (collectively, the “**Parties**”), consummated a series of related transactions in order to obtain equity financing for the Issuer from the Reporting Persons and to remedy certain breaches by the Issuer related to the transactions previously consummated by the Parties on June 24, 2014, including certain provisions of the Equity Holders Agreement, dated June 24, 2014, by and between the Parties (the “**Equity Holders Agreement**”) which governs certain rights and obligations of each of the Parties as they pertain to the Issuer’s securities and the present and future governance of the Issuer. The transactions that occurred on May 15, 2015 are hereinafter referred to as the “**May 2015 Transactions**”.

On May 25, 2016, the Issuer and Mayne Ventures consummated a series of related transactions as part of and in connection with (i) the Issuer’s \$5,500,000 private placement offering to accredited investors (collectively, the “**2016 Offering**”) of 55,000,000 units, consisting of (a) 55,000,000 shares of the Issuer’s common stock, par value \$0.0001 per share (“**Common Stock**”), and (b) warrants to purchase 55,000,000 shares of Common Stock at an exercise price per share of \$0.012 (collectively, the “**2016 Offering Securities**”), and (ii) the Issuer’s issuance to certain FINRA-member broker-dealers engaged in connection with the Offering (the “**Finders**”) of warrants to purchase 466,000 shares of Common Stock at an exercise price per share of \$0.012, pursuant to agreements and arrangements between the Issuer and the Finders (the “**Finders Agreements**”).

Summaries of the June 2014 Transactions and the May 2015 Transactions are set forth in Item 3 of the Original Schedule 13D and Amendment No. 1., respectively, and are incorporated herein by this reference. The following is a summary of the 2016 Offering and related transactions.

Pursuant to the A&R Equity Holders Agreement, Mayne Ventures has a right of refusal to purchase its pro rata share, on a fully-diluted basis, of any new securities issued by the Issuer (except for certain exempt issuances as described in the A&R Equity Holders Agreement) (the “**Mayne Ventures Right of First Refusal**”). In order to fulfill its obligations under the A&R Equity Holders Agreement, the Issuer agreed to enter into a series of transactions with Mayne Ventures which would result in the issuance to Mayne Ventures of its pro rata share, on a fully-diluted basis, of the 2016 Offering Securities and all warrants issued in connection with the Finders Agreements, inclusive of the related warrants issued to Mayne Ventures (collectively, the “**2016 Finders Warrants**”).

On May 25, 2016, as part of the 2016 Offering, the Issuer and Mayne Ventures entered into a Securities Purchase Agreement (the “**2016 Purchase Agreement**”) pursuant to which the Issuer issued to Mayne Ventures (i) 27,885,000 shares of Common Stock (collectively, the “**2016 Offering Shares**”) and (ii) a warrant to purchase 27,885,000 shares of Common Stock at a per share exercise price of \$0.012 (the “**2016 Offering Warrant**” and, together with the 2016 Offering Shares, the “**Mayne Ventures Offering Securities**”) for an aggregate purchase price of \$2,788,500. As a result of the 2016 Purchase Agreement, Mayne Ventures owns approximately 49.6% of the currently outstanding Common Stock. Under the 2016 Purchase Agreement, Mayne Ventures has been granted certain registration rights with respect to the 2016 Offering Shares and the shares of Common Stock underlying the 2016 Offering Warrant. These registration rights are consistent with the registration rights granted to all investors in the 2016 Offering.

On May 25, 2016, in connection with the issuance of the 2016 Finders Warrants, the Issuer and Mayne Ventures entered into a Subscription Agreement (the “**Finders Warrant Subscription Agreement**”) pursuant to which the Issuer issued to Mayne Ventures a warrant to purchase an additional 479,236 shares of Common Stock at a per share exercise price of \$0.012 (the “**Mayne Ventures Finders Warrant**”) for an aggregate purchase price of \$47,924. The Issuer and Mayne Ventures agreed to combine the 2016 Offering Warrant and the Mayne Ventures Finders Warrant into a single warrant to purchase 28,364,236 shares of Common Stock at a per share exercise price of \$0.012 (the “**2016 Combined Warrant**”). The 2016 Combined Warrant is immediately exercisable, at an exercise price of \$0.012 per share, and expires on May 25, 2021.

On May 25, 2016, in order to facilitate the consummation of the transactions contemplated by the 2016 Purchase Agreement and the Finders Warrant Subscription Agreement, and in order to further evidence the Issuer’s compliance with the Mayne Ventures Right of First Refusal, the Issuer and Mayne Ventures entered into a Right of First Refusal Agreement, pursuant to which, among other things, the Issuer represented and warranted to Mayne Ventures that the Mayne Ventures Offering Securities and the Mayne Ventures Finders Warrant, respectively, constituted at a minimum Mayne Ventures’ pro rata share, on a fully-diluted basis, of the 2016 Offering Securities and the 2016 Finders Warrants, respectively.

The issuance of each of the 2016 Offering Securities and the 2016 Finders Warrants, respectively, was exempt from the registration requirements of the Securities Act of 1933, as amended (the “**Securities Act**”), pursuant to Section 4(a)(2) of the Securities Act and/or Regulation D promulgated under the Securities Act because, among other things: (i) each such issuance did not involve a public offering, (ii) Mayne Ventures is an accredited investor, (iii) Mayne Ventures took the applicable securities for investment purposes and not resale and (iv) the Issuer took appropriate measures to restrict the transfer of the applicable securities.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Mayne Pharma Ventures Pty Ltd

/s/ Mark Cansdale
Mark Cansdale, Secretary

Mayne Pharma International Pty Ltd

/s/ Mark Cansdale
Mark Cansdale, Secretary

Mayne Pharma Group Ltd

/s/ Mark Cansdale
Mark Cansdale, Secretary